University of Victoria - Department of Geography

COURSE DESCRIPTION - Fall 2016

GEOG 376 PROCESS GEOMORPHOLOGY (CRN: 11830)

<u>Instructor</u>: Dr. Vic Levson <u>Office hours</u>: by appointment Lectures: T 1430-1720 Labs: weekly as scheduled

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<u>Objectives</u>: This course follows GEOG 276 (Intro. Geomorphology) and investigates fundamental physical processes that create and maintain landforms. Focus is on examination of morphodynamic processes in various landscapes (e.g., fluvial, aeolian, coastal, glacial, hillslope, periglacial). The class involves laboratory experiments and local field trips.

Prerequisites: GEOG 276

Required Textbook:

Ritter, D.F., R.C. Kochel, and J.F. Miller (2011). *Process Geomorphology* (5/e). Waveland Press (ISBN 13: 978-1-57766-669-1). Previous editions are suitable and available.

Suggested readings:

Schroeder, J. (Editor in Chief) et al. (2013). *Treatise on Geomorphology*. <u>Available online</u> as html or PDF via UVic Library E-book. ISBN: 978-0-12-398353-4. DOI: 10.1016/B978-0-12-374739-6.09021-7.

<u>Course webpage</u>: http://coursespaces.uvic.ca/my/. Here you will find all relevant course materials and information (course outline, readings, labs, etc.).

Course evaluation scheme:	Lab assignments	40%
	Mid-term	20%
	Final Exam	30%
	Lab examination	10%

*NOTE: You are required to complete all sections of the course <u>and</u> obtain a passing grade in the laboratory component (labs + lab exam) to pass the course.

<u>Field Trip:</u> To better familiarize you with our local landscape (and to provide a chance to enjoy the outdoors!), a field trip will be held early in the semester. We will visit several geomorphically exciting sites in Greater Victoria by bus during class time. Dress appropriately. Details will be announced in class.

GEOG376 Course policies and important notes:

1. Labs:

- Lab assignments are an essential part of GEOG376. **Students are required to complete <u>all</u> assignments <u>and</u> obtain a passing grade in the lab component (labs + lab exam) to obtain credit for this course.
- Labs are due 1 week after assigned unless specified otherwise.
- <u>All details regarding labs & their marks are managed by your TA</u>. Please attend only the section for which you are registered.
- Please bring: calculator, ruler, protractor, and any other supplies recommended. Software for spreadsheet analyses and graphing (e.g., MS Excel, Open Office, etc.) will also be required for some labs. Most computing labs on campus have these software.
- To help reduce the environmental impact of paper consumption, please submit assignments printed on both sides of the paper. Your TA may also agree to electronic (e.g., PDF) submissions, but please check with them personally.
- 2. Lateness policy: A deduction of 25% of the total mark per weekday (weekends count as 1 day) will be applied to all late assignments. Accommodations are made only for extenuating circumstances with proper medical or counselling documentation provided. *Note that if you must miss a lab, please make arrangements with your TA in advance.

3. Examinations:

- The Mid-term Exam and Lab Exam will be held during lecture on the dates shown below.
- Exam attendance is mandatory. Exceptions will be made <u>only</u> under the following conditions:
 - the instructor is <u>informed in person before</u> the exam that the absence will occur.
 - *Note: do not sit an exam if you are ill, provide medical documentation in advance.
 - the student has <u>proper written documentation</u> of a serious medical or compassionate cause for the absence AND this documentation is provided either before or immediately after the exam;
 - see UVic Course Calendar for official university guidelines

4. Grading:

Grade	Grade point value	Grade scale	Description	
A+ A A-	9 8 7	90-100% 85-89% 80-84%	Exceptional, outstanding and excellent performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.	
B+ B B-	6 5 4	77-79% 73-76% 70-72%	Very good, good and solid performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area.	
C+ C	3 2	65-69% 60-64%	Satisfactory , or minimally satisfactory . These grades indicate a satisfactory performance and knowledge of the subject matter.	
D	1	50-59%	Marginal Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.	
F	0	0-49%	Unsatisfactory performance. Wrote final examination and completed course requirements; no supplemental.	
N	0	0-49%	Did not write examination or complete course requirements by the end of term or session; no supplemental.	

Course Experience Survey (CES)

I value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

ACCESSIBILITY

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a documented disability/health consideration that may require accommodations, please feel free to approach me and/or the Resource Centre for Students with a Disability (RCSD) as soon as possible. The RCSD staff are available

by appointment to assess specific needs, provide referrals and arrange appropriate accommodations http://rcsd.uvic.ca/. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

POSITIVITY AND SAFETY

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members.

Please feel free to contact the course instructor with any concerns.

GEOG376 PROCESS GEOMORPHOLOGY – Lecture Outline (subject to change)

Week	Date	Topic	Readings ¹	Lab	
1 Sept.		Introduction; weathering	Text: Chapters 1-3		
	Sept. 13	processes and sediment	Treatise: 1.1, 1.9, 2.1, 2.5,	No labs	
		processes	4.1, 4.17, 7.3-7.5		
2	Sept. 20	Field trip ² – Geomorphology of Greater Victoria	Field trip handout	Lab 1. Geotechnical	
3	Sept. 27	Slope systems and mass	Text: Chapters 4-5	Lab 2. Mass wasting	
		movement landforms	Treatise: 4.10, 7.1, 7.13-7.23	processes and landforms	
4	Oct. 4	Fluvial processes and landforms	Text: Chapters 6-7 Treatise: 9.1, 9.2, 9.7, 9.8, 9.10	Lab 3. Fluvial processes and sediment transport	
5	Oct. 11	Aeolian processes and landforms	Text: Chapter 8 Treatise: 11.1, 11.2, 11.6, 11.7, 11.11, 11.17	Lab 4. Geomorphic change detection in coastal dunes	
6	Oct. 18	Midterm			
7-8	Oct. 25	Glacial processes and landforms	Text: Chapters 9-10 Treatise: 8.5, 8.6-8.11	<u>Lab 5.</u> Glacial processes and landforms	
9	Nov. 1	Periglacial processes and landforms and Karst	Text: Chapter 11 Treatise: 8.15-8.20	<u>Lab 6.</u> Permafrost and periglacial systems	
9	Nov. 8	Karst processes and landforms	Text: Chapter 12	Reading break (Nov 9- 11) – no lab	
10	Nov. 15	Coastal processes and landforms	Text: Chapter 13 Treatise: 10.1, 10.3-10.6, 10.8, 10.10	<u>Lab 7.</u> Coastal systems	
11	Nov. 22	Course review			
12	Nov. 29	Lab Exam			

¹ Textbook readings are required. Treatise readings are also provided to supplement your lecture notes and serve as a study resource for further details on specific concepts. Do your best to read before each lecture.